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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/322,321      | 05/28/1999  | TONIA MORRIS         | 042390.P6888        | 7825             |

7590 02/12/2003

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EXAMINER


GENCO, BRIAN C

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2615

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |      |                     |   |
|------------------------------|------------------------|------|---------------------|---|
| <b>Office Action Summary</b> | <b>Application No.</b> |      | <b>Applicant(s)</b> |   |
|                              | 09/322,321             |      | MORRIS ET AL.       |   |
|                              | <b>Examiner</b>        |      | <b>Art Unit</b>     |  |
| Brian C Genco                |                        | 2615 |                     |   |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.    | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by (USPN 4,709,259 to Suzuki).

In regards to claim 1 Suzuki discloses “a single-pixel measuring unit is constructed of a single photoelectric conversion unit for each color and the charge storage time for each color can be varied (column 4, lines 6-10).

In regards to claim 2 Suzuki discloses a set of “shift registers coupled to the set of” color pixels (elements 131a, 131b, 131c of Fig. 2), and a “control unit” (element 132 of Fig. 2). Note that Suzuki discloses using the control unit 132 to control the shift registers in accordance with desired integration times for each set of color pixels (column 4, lines 27-41).

In regards to claim 3 Suzuki discloses shift registers 130a, 130b, and 130c wherein the examiner is defining these shift registers to be the claimed “wordline shift register.” See Fig. 2 and column 4, lines 29-41.

In regards to claim 4 see examiners notes on the rejection of claim 3. Note that Suzuki discloses, “The respective shift registers 130a to 130c ... are controlled by a controller 132 (column 4, lines 38-39).

In regards to claim 5 see examiners notes on the rejection of claim 2. See Fig. 2.

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In regards to claim 6 see Fig. 3 and examiners notes on the rejection of claim 2.

In regards to claim 7 Suzuki discloses performing a pre-scan operation to determine the proper integration time for each color in order to obtain a signal that is near saturation (column 5, lines 27-40. Note that the "lighting environment" is determined by measuring the times needed to reach near saturation for each color and that the integration periods are determined in order to maximize the signal for each color based on the "lighting environment."

In regards to claim 8 see examiners notes on the rejection of claims 2 and 7.

In regards to claim 9 see examiners notes on the rejection of claims 2 and 7.

In regards to claim 10 Suzuki discloses "reading a set of pixel sensors based on the set of predetermined integration times" (column 5, line 27 – column 6, line 16; Fig. 2).

In regards to claim 11 see examiners notes on the rejection of claims 3, 4, and 10.

In regards to claims 12-16 see examiners notes on the rejection of claims 7-11 respectively.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over (USPN 6,175,383 to Suzuki).

In regards to claim 17 see examiners notes on the rejection of claims 1 and 2. Note that a lens is an inherent part of an imaging device. Further note that while Suzuki does not directly disclose a "local user interface unit coupled to the system controller" it is an implicit function of any imaging device to have at a minimum a "local user interface unit coupled to the system controller" to start the supply of power to the device and "system controller." Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have had a "local user interface unit coupled to the system controller" in order to begin the supply of power to the image sensor.

In regards to claim 18-22 see examiners notes on the rejection of claims 2-6.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(USPN 5,541,654 to Davis)

(USPN 6,175,383 to Yadid-Pecht et al)

(USPN 5,519,514 to TeWinkle)

(USPN 4,335,943 to Numata)

(USPN 5,105,264 to Erhardt)

(USPN 5,937,221 to Yamamoto et al)

(USPN 5,625,470 to Ueta et al)

(USPN 5,943,514 to Sato et al)

(USPN 5,251,021 to Parulski et al)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian C. Genco who can be reached by phone at 703-305-7881 or by fax at 703-746-8325. The examiner can normally be reached on Monday thru Friday 8:00am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center 2600 customer service office whose telephone number is 703-306-0377.

Brian C Genco  
Examiner  
Art Unit 2615

February 7, 2003

A handwritten signature in black ink, appearing to read 'Andrew Christensen', with a long horizontal flourish extending to the right.

ANDREW CHRISTENSEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600